

sub
bl
--19. A dry microorganism culture which comprises at least one microorganism species in carrier-bound form, wherein the culture is present in the form of particles which

- a) have a particle size of at least about 0.1 mm and
- b) comprise from about 10^8 to 10^{12} cfu/g of at least one microorganism species; and
- c) are compressed.

2 20. A microorganism culture as claimed in claim 19, wherein the particles have been compressed under the action of a linear force from about 5 to 15 kN/cm or a pressure from about 90 to 160 MPa.

3 21. A microorganism culture as claimed in claim 19, wherein the compressed particles comprise compacted broken material having a diameter of from about 0.1 mm to about 2 mm.

4 22. A microorganism culture as claimed in claim 19, wherein the compressed particles comprise tablets having a diameter of from about 2 to 50 mm and a ratio of diameter to thickness of from about 1:0.1 to about 10:1.

5 23. A microorganism culture as claimed in claim 19, wherein it comprises, a further component, an effervescent additive.

A 6 24. A microorganism culture as claimed in claim 19, wherein, as carrier, it comprises at least one matrix material for embedding the microorganism cells with or without at least one further cell-stabilizing additive.

7 25. A microorganism culture as claimed in claim 19, wherein it comprises at least one lactic-acid-producing bacterial species.

8 26. A microorganism culture as claimed in claim 25, wherein the bacterial

species is selected from bacteria of the genus *Lactobacillus* sp.

- sub B2
27. A process for producing a dry microorganism culture, comprising at least one microorganism species in carrier-bound form, which comprises
- dissolving or suspending at least one substance suitable for forming a carrier in a liquid comprising at least one microorganism species,
 - drying the resultant mixture in a spray-dryer, for the spray-drying use being made of a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C, and
 - removing the dried material from the spray dryer, this dried material having an exit temperature of from about 45 to 75°C.

28. A process as claimed in claim 27, wherein, in a further stage d), the dry material is subjected to a further drying at a temperature in the range from about 15 to 50°C in a gas atmosphere or in vacuo and/or at least one desiccant is added.

29. A process as claimed in claim 27, wherein, as dry material, a powder concentrate having a content of viable microorganisms of from about $5 \cdot 10^8$ to $1 \cdot 10^{12}$ cfu/g is obtained.

sub B3
A1

30. Dry compressed microorganism culture according to claim 19, obtained from a powder concentrate of microorganism culture dried in a spray-dryer, for the spray-drying use being made of a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C.

sub C3

31. A process for preparing a dry microorganism culture as claimed in claim 19, which comprises

- producing a powder concentrate of the microorganism culture by carrier-bound

- spray-drying, carrier-bound freeze-drying or carrier-bound fluidized-bed drying,
- ii) with or without admixing the powder concentrate with one or more coformulants and
 - iii) compacting or tableting this mixture.

13
14 32. A process as claimed in claim 31, wherein the compacted powder concentrate from stage iii) is broken, with or without classification.

Sub C4
33. A process for preparing a dry agglomerated microorganism culture, which comprises

- i) preparing a powder concentrate of the microorganism culture by carrier-bound spray-drying, carrier-bound freeze drying or carrier-bound fluidized--bed drying,
- ii) with our without admixing the powder concentrate with one or more coformulants and
- iii) agglomerating this mixture.

34. A process as claimed in claim 31, wherein the spray-drying is performed in a spray-dryer in which a conditioned dried gas is employed having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C.

sub B
A
35. A starter culture for foodstuffs and feedstuffs comprising a microorganism culture as claimed in claim 19, or prepared by a process for producing a dry microorganism culture, comprising at least one microorganism species in carrier-bound form, which comprises

- a) dissolving or suspending at least one substance suitable for forming a carrier in a liquid comprising at least one microorganism species,
- b) drying the resultant mixture in a spray-dryer, for the spray-drying use being

made of a conditioned dried gas having a dew point of less than about +50°C,
heated to a temperature in the range of above about 80°C, and
removing the dried material from the spray dryer, this dried material having an
exit temperature of from about 45 to 75°C.

36. A foodstuff or feedstuff obtainable by using a microorganism culture as
claimed in claim 19 or prepared by a process for producing a dry microorganism
culture, comprising at least one microorganism species in carrier-bound form, which
comprises

- a) dissolving or suspending at least one substance suitable for forming a carrier in
a liquid comprising at least one microorganism species,
- b) drying the resultant mixture in a spray-dryer, for the spray-drying use being
made of a conditioned dried gas having a dew point of less than about +50°C,
heated to a temperature in the range of above about 80°C, and
- c) removing the dried material from the spray dryer, this dried material having an
exit temperature of from about 45 to 75°C.

37. A process as claimed in claim 33, wherein the spray-drying is performed
in a spray-dryer employing a conditioned dried gas having a dew point of less than
about +50°C, heated to a temperature in the range of above about 80°C.--

Sub
By
Cm'd

Al
00673136-101100

Q